DEPARTMENT OF THE ARMY UNITED STATES ARMY INTELLIGENCE AND SECURITY COMMAND Arlington Hall Station Arlington, Virginia 22212

USAINSCOM Regulation No. 381-12

1 March 1983

Military Intelligence WEATHER INTELLIGENCE AND THREAT ANALYSIS PROGRAM (WINTAP)

Supplementation of this regulation is prohibited unless prior approval is obtained from the Headquarters, ATTN: IAOPS-PMD.

Paragra	iph Page
Purpose1	1
Applicability 2	1
References 3	1
Explanation of Terms 4	2
Concept 5	2
Responsibilities 6	3
Appendix A. Procedures for Obtaining Climatological Support	A-1
Appendix B. Examples of Climatological Data	B-1
Appendix C. Considerations for WINTAP EEI	C-1
Appendix D. Steps in Development of Weather Intelligence and Threat Analysis	D-1
Glossa ry	Glossary 1

- 1. <u>Purpose</u>. This regulation implements the US Army Intelligence and Security Command (INSCOM) Weather Intelligence and Threat Analysis Program (WINTAP), and sets forth INSCOM policies, responsibilities, and procedures for the WINTAP.
- 2. Applicability. This regulation applies to all elements of the INSCOM.
- 3. References.
 - a. Required publications (publications that must be used in connection

with this regulation).

- (1) AR 115-1 (Point Weather Warning Dissemination). Cited in paragraph 5.
- (2) AR 115-10 (Meteorological Support for the US Army). Cited in paragraph 5.
- (3) AR 115-12 (US Army Requirements For Weather Service Support). Cited in paragraph 5.
 - (4) AR 310-25 (Dictionary of US Army Terms). Cited in paragraph 4.
- b. Related publications (publications that are sources of additional information).
- (1) AR 381-11 (Threat Support to US Army Force, Combat, and Materiel Development).
 - (2) HODA Meteorological Plan for Action (MPA).
- (3) USAINSCOM Regulation 381-11 (Intelligence and Threat Analysis Production Support).
 - (4) HO, INSCOM Echelons Above Corps (EAC) Architecture, 15 Jan 82.
 - (5) FM 30-10 (Military Geographic Intelligence), Chapter 2.
- 4. Explanation of Terms. Terms used in this regulation are defined in JCS Publication 1 and AR 310-25 (Dictionary of US Army Terms), AR 115-10, and 115-12 except as follows:
- a. Weather Intelligence. Intelligence which predicts the degree, likelihood, and naturé of the impact of weather phenomena in support of specific military plans, and which uses weather support products, hydrological and weather forecasts in analysis of the capability of foreign nations to manipulate the weather and the effects of weather phenomena on possible enemy courses of action.
- b. Weather Intelligence and Threat Analysis Program (WINTAP). An INSCOM developed program to ensure provision of weather intelligence and threat analysis support to US Army.
- c. Weather Threat. An assessment of weather phenomena in terms of their effects on combat material, employment doctrine, force structure planning or development, and/or friendly courses of action in specific plans.
- 5. Concept. Weather phenomena, such as wind, temperature, air density, and other weather factors, are major considerations affecting the capabilities of the tactical forces to communicate, shoot and move. The WINTAP provides weather intelligence and weather threat support to meet Army requirements. The WINTAP also makes provisions for weather support to INSCOM activities.

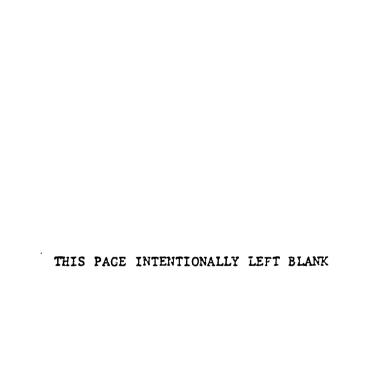
- a. WINTAP is designed to meet INSCOM's operational and threat analysis production needs. It addresses the tactical commanders' needs for weather intelligence and threat data required to plan and execute combat operations.
- b. To adequately accommodate the Army's requirements and provide support to INSCOM activities, WINTAP will be planned and executed in two modes: INSCOM weather intelligence and threat support to Army; and weather support to INSCOM. Weather intelligence and threat support will be provided in accordance with this regulation and the WINTAP. Weather support to INSCOM activities will be as prescribed in AR 115-1, AR 115-10 and AR 115-12. Procedures for obtaining climatological data and examples of climatological data are shown in appendix A and B.

6. Responsibilities.

- a. Deputy Chief of Staff for Operations (DCSOPS). The DCSOPS serves as the INSCOM Central Focal Point (CFP) of contact for WINTAP and is responsible for management and implementation of the WINTAP. The DCSOPS-
- (1) Ensures that WINTAP products satisfy user requirements, and are properly disseminated.
- (2) Provides for or arranges training of INSCOM personnel in the use of weather service support products applicable to INSCOM missions.
- (3) Provides guidance for and monitors the development and maintenance of the user Essential Elements of Intelligence (EEI) master list. Considerations for WINTAP EEI are listed at appendix C. Steps in the development of weather intelligence and threat analysis are shown in appendix D.
- (4) Directs, initiates and participates in studies and plans for developing criteria and priorities for WINTAP products.
- (5) Reviews the use of weather service support products in the production of intelligence and threat analysis products. This review is the basis for annual revalidation of the weather service support requirements.
- (6) Maintains liaison with national and departmental agencies and commands in matters of WINTAP interest.
- (7) Reviews current weather service support plans, policies, procedures and doctrine applicable to the INSCOM missions and functions and provides comments and recommendations to meteorological and weather support documents originated by DA, INSCOM and other MACOMs.
- (8) Reviews INSCOM mission areas for weather impact and recommends weather service support products that can enhance accomplishment of the operational mission.
- b. Deputy Chief of Staff for Force Modernization (DCSFM). The DCSFM, in concert with the DCSOPS, reviews organizational and operational doctrine, concepts, studies, and associated data for WINTAP implications. The DCSFM-

- (!) Assists INSCOM and TRADOC in establishing responsibility for WINTAP doctrine and procedures at EAC and Echelous Corps and Below (ECB).
- (2) Reviews combat, material, and force modernization documentation for WINTAP implications.
- c. Deputy Chief of Staff for Logistics (DCSLOG). The DCSLOG reviews and assesses the logistical impact of the WINTAP.
- d. Deputy Chief of Staff for Resources Management (DCSRM). The DCSRM provides resource programming guidance, manpower authorization and documentation to the WINTAP.
 - e. Other INSCOM staff offices. The INSCOM staff-
- (1) Assists the DCSOPS to implement and conduct the WINTAP within their areas of responsibility.
 - (2) Requests DCSOPS-
 - (a) To support their weather support needs.
 - (b) To provide guidance on WINTAP matters.
- f. Commander (Cdr) Intelligence and Threat Analysis Center (ITAC). ITAC will produce products to meet US Army requirements for weather intelligence and threat analysis. The Cdr ITAC will-
- (1) Ensure that weather threat is considered and (or) included in all INSCOM threat production.
- (2) Conduct research and studies or collect and coordinate on methods and techniques, for the development of weather intelligence to facilitate adequate and prompt response to INSCOM and Army requirements for WINTAP products.
- (3) In response to validated intelligence production requirements (IPRs), assist INSCOM and Army organizations and activities to develop comprehensive EEIs, IPRs and intelligence collection requirements (ICRs) for WINTAP collection and production.
- (4) Develop weather support requirements for inclusion in or production of both weather intelligence and weather threat analyses IPRs, and for other intelligence IPRs, approved by HODA.
- (5) Submit weather support requirements through channels to USAF Military Airlift Command (MAC) IAW AR 115-10 and AR 115-12. A copy of the requirements will be furnished to HQ INSCOM (ATTN: IAOPS-PMD).
 - g. Other INSCOM units. Other INSCOM units will-
- (1) Ensure WINTAP is considered and (or) included in their intelligence. functions.

- (2) Develop weather support requirements for their intelligence and WINTAP functions.
- (3) Submit weather support requirements through channels to USAF Military Airlift Command (MAC) IAW AR 115-10 and AR 115-12. A copy of the requirements will be furnished to HQ INSCOM (ATTN: IAOPS-PMD).



Procedures For Obtaining Climatological Support

- 1. Units with Staff Weather Officer (SWO) support will submit their request to their SWO. The following is furnished for use by units without SWO support. Requests for climatological support will be comprehensive and include information on its application, essentiality to mission accomplishment and what the adverse effects of not providing the support could be.
- 2. In addition the following information is necessary to process support requests directed to the US Air Force (USAF) Environmental Technical Applications Center (ETAC).
 - a. Unit/Priority
 - (1) Unit or agency to which support is to be provided. Include project or study number.
- (2) Specify the supported units DOD Force Activity Designator (FAD) priority.
 - b. Provide the specific address to which support products are to be forwarded.
- c. Message priority/precedence for the response (if applicable) and security classification of support products. Does the association of time and location with weather data require classified handling?
 - d. Point of contact: name, organization, message address, telephone number.
 - e. Statement of operational problem. Be specific!
- f. Environmental data and/or support required. Give specific locations, dates/times, criteria, frequency (i.e., hourly, monthly, seasonal, etc.), format, etc.
- g. Date when the data or study is required. Time may be stated if critical. State the impact if suspense date cannot be met.
- 3. Requests will be submitted to:

USAFETAC/DO Scott AFB. IL 62225

An information copy of the request will be sent to:

Cdr, INSCOM ATTN: IAOPS-PMD Arlington Hall Station Arlington, VA 22212

- 4. INSCOM point of contact for weather and climatological support is IAOPS-PMD, AV 222 6767, Comm 202 692 6767.
- 5. This appendix will be deleted upon publication of HQDA pamphlet on obtaining climatology support.

		, -	
THIS PAGE	INTENTIONALLY	LEFT BLANK	

APPENDIX B

Examples of Climatological Data

Definitions

C- Celsius Temperature Scale.

cm- Centimeter

km- Kilometer

KMPH- Kilometer per hour.

Mean- The numerical value where 50% of the cases fall above and 50% of the cases fall below that value.

Climatology Examples

The following are types of information that can be obtained from USAFETAC. The list is not all-inclusive. Units having requirements should submit them to the SWO or USAFETAC.

Climate

What is the general variation and pattern of temperature, precipitation, humidity, winds, clouds, dust, thunderstorms, and air pressure?

How do these weather factors affect visibility and ceiling?

What special meteorological effects, such as hail, tornados and sand storms occur in the country?

The most frequently used climatic parameters are:

Temperature

Absolute Maximum

Mean Daily Maximum

Mean Daily Minimum

Absolute Minimum

Mean number of days > 40 C Maximum

Mean number of days > 30 C Maximum

Mean number of days < 0 C Minimum

Mean number of days < -20 C Minimum

Precipitation

Mean relative humidity at 0600 LST (Local Standard Time)

Mean relative humidity at 1200 LST

Mean relative humidity at 1500 LST

Mean precipitation

Absolute Maximum precipitation

Absolute Minimum precipitation

Maximum 24 hour precipitation

Mean number of days with precipitation > .025 cm

Mean number of days with thunderstorms

Mean monthly snowfall

Absolute Maximum snowfall

Maximum 24 hour snowfall

Mean number of days with snowfall > 2.5 cm

Mean Monthly snow depth

Wind

Direction and Mean speed kilometer per hour (KMPH) of prevailing wind (e.g, 0300, 0600, 1500)

Percentage frequency of windspeed > 43 KMPH at specified hours (e.g., 0300, 0900, 1500, 2100)

Fastest one minute windspeed and direction (or peak gust)

Clouds and Dust

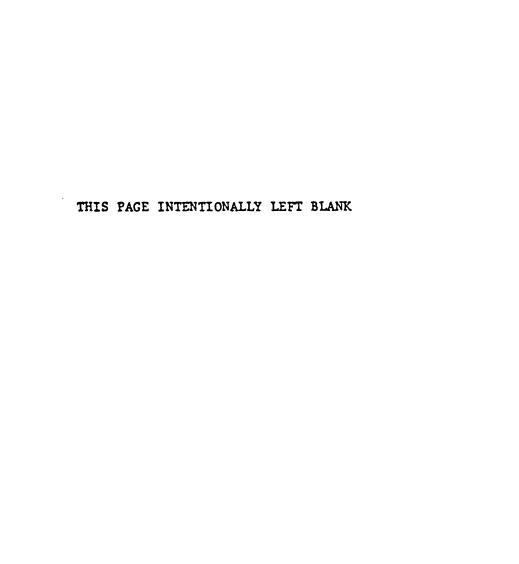
Mean cloudiness, at specified hours (e.g., 0000, 0300, 0600, 1500, 1800, 2100)

Mean number of days with cloud cover expressed in percentage

Mean number of days with dust

Visibility and Ceiling

- Percentage frequency of visibility < 10 km, at specified hours (e.g., 2400, 0300, 0600, 0900, 1200, 1500, 1800, 2100)
- Percentage frequency of visibility < 4 km, at specified hours (e.g., 2400, 0300, 0600, 0900, 1200, 1500, 1800, 2100)
- Mean number of days with visibility < 1 km
- Percentage frequency of ceiling < 1,500 M, at specified hours (e.g., 2400, 0300, 0600, 0900, 1200, 1500, 1800, 2100)
- Percentage frequency of ceiling < 600 M, at specified hours (e.g., 2400, 0300, 0600, 0900, 1200, 1500, 1800, 2100)
- Percentage frequency of ceiling < 300 M and visibility < 4 km at specified hours (e.g., 0600, 1500)
- Percentage frequency of ceiling < 200 M and visibility < 2 km at specified hours (e.g. 0600, 1500)
- Mean number of days with sky cover expressed in percentage and visibility 5 km, at specified hours (e.g., 0300, 0900, 1500, 2100)
- Percentage frequency of ceiling 1,500 M and/or visibility < 8 km Percentage frequency of ceiling < 450 M and/or visibility < 5 km
 - at specified hours (e.g., 2400-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300)
- Percentage frequency of ceiling < 100 M and/or visibility < 1.5 km at specified hours (e.g., 2400-0200, 0300-0500, 0600-0800, 0900-1100)



APPENDIX C

Considerations for WINTAP EEI

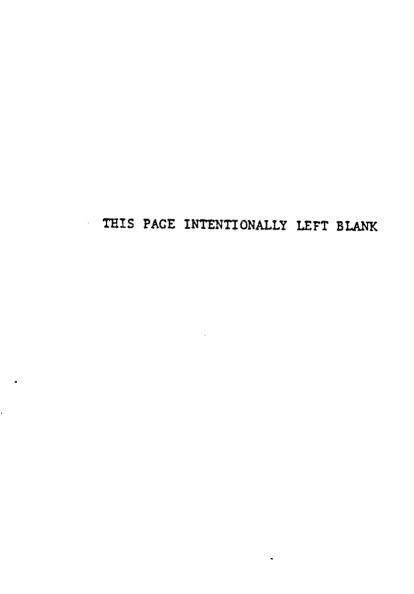
- 1. What is the perception of the enemy towards the impact of weather on the conduct of warfare?
- 2. What are the results and impact of testing activities conducted by the enemy to determine weather impact on personnel, equipment, training, tactics, and strategy?
- 3. What type of training is conducted and applied by the enemy to incorporate weather effects to obtain tactical or stategic advantages?
- 4. What capabilities does the enemy have to modify the natural weather conditions?
- a. What capabilities does the enemy have to exploit weather modification in tactical situations?
 - b. What is the reliability of the enemy's weather modification efforts?
- 5. What is the enemy doctrine on the use of weather modification under combat conditions?
- 6. What is the enemy's capability for weather forecasting?
- 7. What are the capabilites, vulnerabilities and signatures of the enemy's facilities providing weather support to his combat forces?
- 8. What is the application of weather forecasts in the enemy's doctrine, concepts operations and training?
- 9. What are the enemy's operational and doctrinal concepts of trafficability on frozen or otherwise unusual surfaces?
- 10. What capabilities does the enemy have to forecast adverse trafficability?
- 11. What is the reliability of adverse weather trafficability products?



APPENDIX D

STEPS IN THE DEVELOPMENT OF WEATHER INTELLIGENCE AND THREAT ANALYSIS

- 1. Development of weather effects data.
- a. INSCOM will furnish guidance documentation on weather requirements and impacts on operations and equipment. Users should use this documentation to determine weather impacts upon their missions. Critical values are the values at which the weather parameter significantly degrades the mission.
- b. The Engineer Topographic Laboratories (ETL) are developing weather effects documentation. When available, this information will be furnished to the field.
- c. The users should document any weather effects on their missions and pass this information to DCSOPS, ATTN: IAOPS-PMD, for updating the data base.
- 2. Using documentation in a and b above, plus any locally developed weather effects data, the users develop Essential Elements of Information (EEI) needed on enemy operations, equipment, and weather facilities. Information intended to answer these EEI constitute weather intelligence. EEI developed will be documented and a copy furnished to DCSOPS, ATTN: IAOPS-PMD, for EEI Master List maintenance.
- 3. Development of a weather intelligence and weather effects matrix will indicate EEI and weather support gaps. Collection plans for EEI and weather support requirements articulation are user responsibilities. The critical values and impacts of weather form the basis for weather support requirements submitted to the supporting Air Weather Service (AWS) unit.
- 4. Utilizing observed and forecast weather support products supplied by the supporting weather support unit, existing or forecasted critical values of weather effects and weather intelligence are determined. These show the vulnerabilities and capabilities of our own and the enemy commanders' courses of action, as impacted by weather, for a specific location and time period. This constitutes weather threat analysis.



GLOSSARY

AFB- Air Force Base.

AR- Army regulation.

AWS- Air Weather Service.

C- Celsius.

CDR- Commander.

CFP- Central Focal Point.

DCSFM- Deputy Chief of Staff for Force Modernization, INSCOM.

DCSLOG- Deputy Chief of Staff for Logistics, INSCOM.

DCSRM- Deputy Chief of Staff for Resource Management, INSCOM.

DCSOPS- Deputy Chief of Staff for Operations, INSCOM.

EAC- Echelons Above Corps.

ECB- Echelons Corps and Below.

EEI- Essential Elements of Information.

ETAC- Environmental Technical Applications Center.

ETL- Engineer Topographic Laboratories.

HO- Headquarters.

HQDA- Headquarters Department of the Army.

IAW- In accordance with.

INSCOM- US Army Intelligence and Security Command.

ICR- Intelligence Collection Requirement.

IPR- Intelligence Production Requirement.

ITAC- Intelligence and Threat Analysis Center.

MAC- Military Airlift Command.

MACOM- US Army Major Command.

MPA- Meteorological Plan for Action.

SWO- Staff Weather Officer.

TRADOC- US Army Training and Doctrine Command.

USAF- United States Air Force.

WINTAP- Weather Intelligence and Threat Analysis Program.

The proponent of this regulation is the Office of the Deputy Chief of Staff for Operations. Users are invited to send comments and suggestions for improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to this Headquarters, ATTN: IAOPS-PMD.

FOR THE COMMANDER:

OFFICIAL:

Administrative Officer

Distribution: A B C

CHARLES C. PARTRIDGE Colonel, GS Chief of Staff